0280

#2

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/995,515

DATE: 12/05/2001
TIME: 10:01:39

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Output Set: N:\CRF3\11212001\I995515.raw

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   5 <120> TITLE OF INVENTION: Transforming Growth Factor-Beta-Related Molecules and
   6       Uses Thereof
   8 <130> FILE REFERENCE: 00-659-A
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/995,515
C--> 11 <141> CURRENT FILING DATE: 2001-11-28
  13 <150> PRIOR APPLICATION NUMBER: 60/253,476
  14 <151> PRIOR FILING DATE: 2000-11-28
  16 <160> NUMBER OF SEQ ID NOS: 27
  18 <170> SOFTWARE: PatentIn Ver. 2.0
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  36 atc tct aat gtg gag cag ctg atc ctg ggg atc ccg ggc cag aat cgc  160
  37 Ile Ser Asn Val Glu Gln Leu Ile Leu Gly Ile Pro Gly Gln Asn Arg
  38              15                  20                  25
  40 cgg gag ata ggc cat ggc cag gat atc ttt cca gca gag aag ctc tgc  208
  41 Arg Glu Ile Gly His Gly Gln Asp Ile Phe Pro Ala Glu Lys Leu Cys
  42              30                  35                  40
  44 cat ctg cag gat cgc aag gtg aac ctt cac aga gct gcc tgg ggc gag  256
  45 His Leu Gln Asp Arg Lys Val Asn Leu His Arg Ala Ala Trp Gly Glu
  46          45                  50                  55
  48 tgt att gtt gca ccc aag act ctc agc ttc tct tac tgt cag ggg acc  304
  49 Cys Ile Val Ala Pro Lys Thr Leu Ser Phe Ser Tyr Cys Gln Gly Thr
  50  60                  65                  70                  75
  52 tgc ccg gcc ctc aac agt gag ctc cgt cat tcc agc ttt gag tgc tat  352
  53 Cys Pro Ala Leu Asn Ser Glu Leu Arg His Ser Ser Phe Glu Cys Tyr
  54                  80                  85                  90
  56 aag agg gca gta cct acc tgt ccc tgg ctc ttc cag acc tgc cgt ccc  400
  57 Lys Arg Ala Val Pro Thr Cys Pro Trp Leu Phe Gln Thr Cys Arg Pro
  58              95                 100                 105
  60 acc atg gtc aga ctc ttc tcc ctg atg gtc cag gat gac gaa cac aag  448
  61 Thr Met Val Arg Leu Phe Ser Leu Met Val Gln Asp Asp Glu His Lys
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  64 atg agt gtg cac tat gtg aac act tcc ttg gtg gag aag tgt ggc tgc  496
  65 Met Ser Val His Tyr Val Asn Thr Ser Leu Val Glu Lys Cys Gly Cys
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  68 tct tga gataccccaa agcctcctac tggcctcagg gccacctaag tctcaggact  552
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 79 <212> TYPE: PRT
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 87             20                  25                  30
 89 Gly Gln Asp Ile Phe Pro Ala Glu Lys Leu Cys His Leu Gln Asp Arg
 90         35                  40                  45
 92 Lys Val Asn Leu His Arg Ala Ala Trp Gly Glu Cys Ile Val Ala Pro
 93     50                  55                  60
 95 Lys Thr Leu Ser Phe Ser Tyr Cys Gln Gly Thr Cys Pro Ala Leu Asn
 96 65                  70                  75                  80
 98 Ser Glu Leu Arg His Ser Ser Phe Glu Cys Tyr Lys Arg Ala Val Pro
 99                 85                  90                  95
101 Thr Cys Pro Trp Leu Phe Gln Thr Cys Arg Pro Thr Met Val Arg Leu
102             100                 105                 110
104 Phe Ser Leu Met Val Gln Asp Asp Glu His Lys Met Ser Val His Tyr
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107 Val Asn Thr Ser Leu Val Glu Lys Cys Gly Cys Ser
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124 Met Arg Phe Phe Ser Ala Arg Gln His Gly Phe Thr Leu Ile Phe Lys
125  1               5                   10                  15
127 aag aca aag att cca gcc act gat gtc gct gat gcc agc ctg aat gaa 156
128 Lys Thr Lys Ile Pro Ala Thr Asp Val Ala Asp Ala Ser Leu Asn Glu
129             20                  25                  30
131 tgt tcc agt acc gaa agg aaa caa gac gta gtg ttg ctg ttc gtg acc 204
132 Cys Ser Ser Thr Glu Arg Lys Gln Asp Val Val Leu Leu Phe Val Thr
133             35                  40                  45
135 ttg tcc cac aca cag cca cct ctg ttt cac ctg cct tat gtc cag aaa 252
136 Leu Ser His Thr Gln Pro Pro Leu Phe His Leu Pro Tyr Val Gln Lys
137     50                  55                  60
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145                      85                  90                  95
147 ctc tgc cat ctg cag gat cgc aag gtg aac ctt cac aga gct gcc tgg   396
148 Leu Cys His Leu Gln Asp Arg Lys Val Asn Leu His Arg Ala Ala Trp
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151 ggc gag tgt att gtt gca ccc aag act ctc agc ttc tct tac tgt cag   444
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155 ggg acc tgc ccg gcc ctc aac agt gag ctc cgt cat tcc agc ttt gag   492
156 Gly Thr Cys Pro Ala Leu Asn Ser Glu Leu Arg His Ser Ser Phe Glu
157         130                 135                 140
159 tgc tat aag agg gca gta cct acc tgt ccc tgg ctc ttc cag acc tgc   540
160 Cys Tyr Lys Arg Ala Val Pro Thr Cys Pro Trp Leu Phe Gln Thr Cys
161 145                 150                 155                 160
163 cgt ccc acc atg gtc aga ctc ttc tcc ctg atg gtc cag gat gac gaa   588
164 Arg Pro Thr Met Val Arg Leu Phe Ser Leu Met Val Gln Asp Asp Glu
165                 165                 170                 175
167 cac aag atg agt gtg cac tat gtg aac act tcc ttg gtg gag aag tgt   636
168 His Lys Met Ser Val His Tyr Val Asn Thr Ser Leu Val Glu Lys Cys
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172 Gly Cys Ser
173         195
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184 <212> TYPE: PRT
185 <213> ORGANISM: Homo sapiens
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194 Cys Ser Ser Thr Glu Arg Lys Gln Asp Val Val Leu Leu Phe Val Thr
195         35                  40                  45
197 Leu Ser His Thr Gln Pro Pro Leu Phe His Leu Pro Tyr Val Gln Lys
198         50                  55                  60
200 Pro Leu Ile Ser Asn Val Glu Gln Leu Ile Leu Gly Ile Pro Gly Gln
201  65                      70                  75                  80
203 Asn Arg Arg Glu Ile Gly His Gly Gln Asp Ile Phe Pro Ala Glu Lys
204                      85                  90                  95
206 Leu Cys His Leu Gln Asp Arg Lys Val Asn Leu His Arg Ala Ala Trp
207                 100                 105                 110
209 Gly Glu Cys Ile Val Ala Pro Lys Thr Leu Ser Phe Ser Tyr Cys Gln
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212 Gly Thr Cys Pro Ala Leu Asn Ser Glu Leu Arg His Ser Ser Phe Glu
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215 Cys Tyr Lys Arg Ala Val Pro Thr Cys Pro Trp Leu Phe Gln Thr Cys
216 145                  150                  155                  160
218 Arg Pro Thr Met Val Arg Leu Phe Ser Leu Met Val Gln Asp Asp Glu
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241            35                  40                  45
243 Gly Leu Phe Leu Glu Ile Leu Val Lys Glu Asp Arg Asp Ser Gly Val
244      50                  55                  60
246 Asn Phe Gln Pro Glu Asp Thr Cys Ala Arg Leu Arg Cys Ser Leu His
247 65                  70                  75                  80
249 Ala Ser Leu Leu Val Val Thr Leu Asn Pro Asp Gln Cys His Pro Ser
250               85                  90                  95
252 Arg Lys Arg Arg Ala Ala Ile Pro Val Pro Lys Leu Ser Cys Lys Asn
253            100                 105                 110
255 Leu Cys His Arg His Gln Leu Phe Ile Asn Phe Arg Asp Leu Gly Trp
256         115                  120                  125
258 His Lys Trp Ile Ile Ala Pro Lys Gly Phe Met Ala Asn Tyr Cys His
259      130                  135                  140
261 Gly Glu Cys Pro Phe Ser Leu Thr Ile Ser Leu Asn Ser Ser Asn Tyr
262 145                  150                  155                  160
264 Ala Phe Met Gln Ala Leu Met His Ala Val Asp Pro Glu Ile Pro Gln
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267 Ala Val Cys Ile Pro Thr Lys Leu Ser Pro Ile Ser Met Leu Tyr Gln
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306 gaagtggcag ctcctggctc attcctgggc tcttggctct gggtctttgg tgcatgtgtt 300
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368 ag agg gca gta cct acc tgt ccc tgg ctc ttc cag acc tgc cgt ccc 2068
370 acc atg gtc aga ctc ttc tcc ctg atg gtc cag gat gac gaa cac aag 2116
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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date